

Band 55 protein

	10	20	30	40	50
ISR	MESAAEPLPARPALETEGLRFLHVTVGSLLASYGWYVLFSCILLYIVIQLK				
MOUSE	-DRD	--S-	@-----S-*-----	I-----	R
RAT	---S-----S-----I-----V-----				
HUMAN	--RQ	--S-S-----T-----T-----IV-----V-F--			
	60	70	80	90	100
ISR	LSVRLRALRQRQLDQADAVLEPDAVVKRQEALAAARLRMQEDLNAQVEKHK				
MOUSE	--L-----	ET-----	V-----		
RAT	--L-----	E-----	V-----		
HUMAN	--A-----	R-A-AV-----V-----	K-----E-----		
	110	120	130	140	150
ISR	KEKLRQLEEEKRRQKIEMWDSMQEGRSYRRNPGRPQEEDGPGPSTSSSVT				
MOUSE	-----K-----S-----/-/-I				
RAT	-----K-----/-/-I				
HUMAN	--K-----	K-KG-AKK-----S-----/-L			
	160	170	180	189	
ISR	RKGKSDKKPLRGNGYNPLTGEGGGTCAWRPGRRGPSSGG				
MOUSE	P-----	G-----	S-----		
RAT	P-----	G-----			
HUMAN	/----R-----	G-----S-----A-----S-----			

@=R or S

*= R or O

A= mixture of A and V

Figure 1

2/20

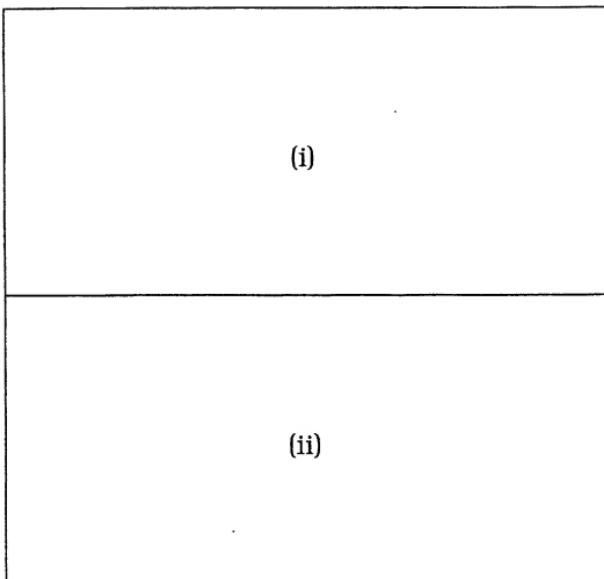


Figure 2

3/20

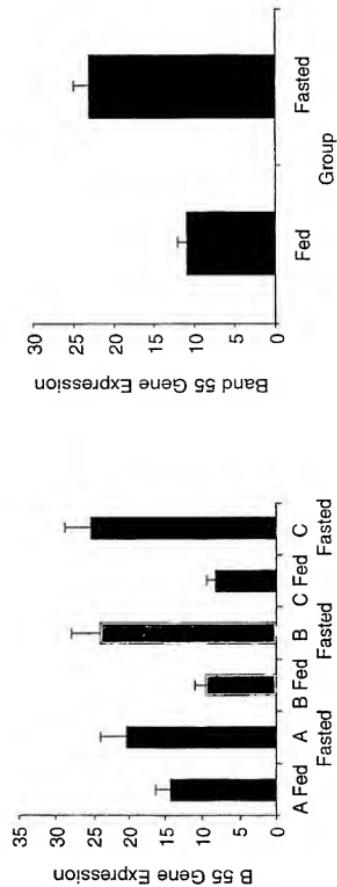
Band 55 Liver

Figure 2(i)

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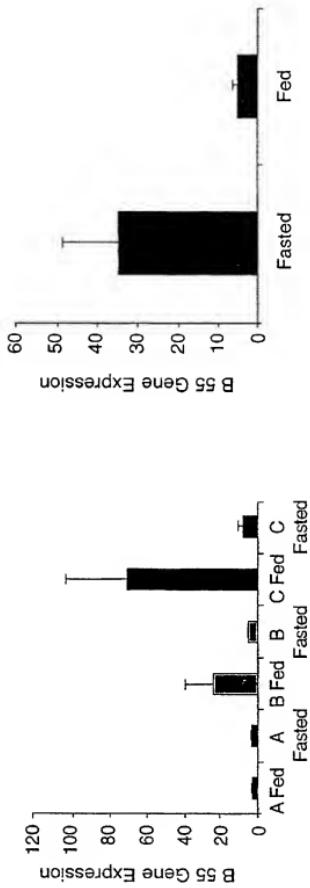
Band 55 Adipose Tissue

Figure 2(ii)

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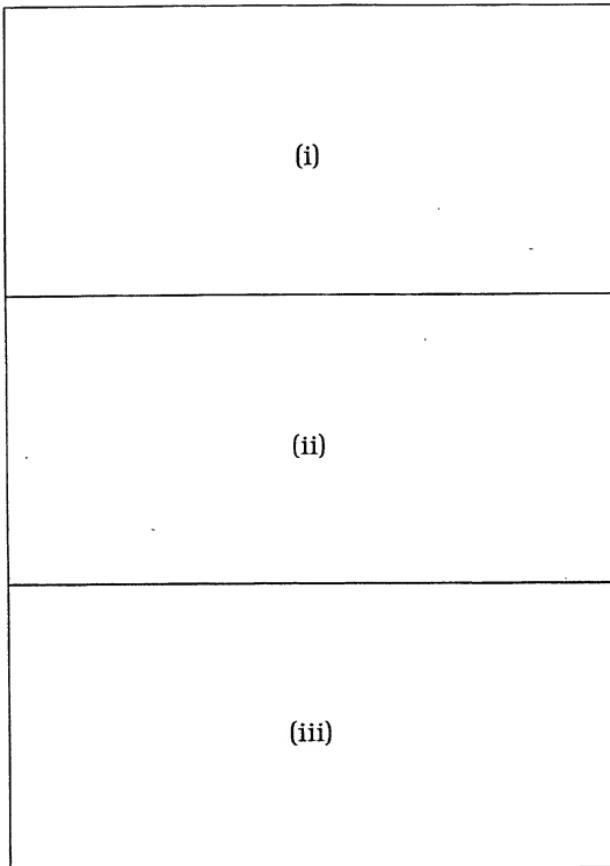


Figure 3

6/20

Band 60 v. Body Weight - All animals

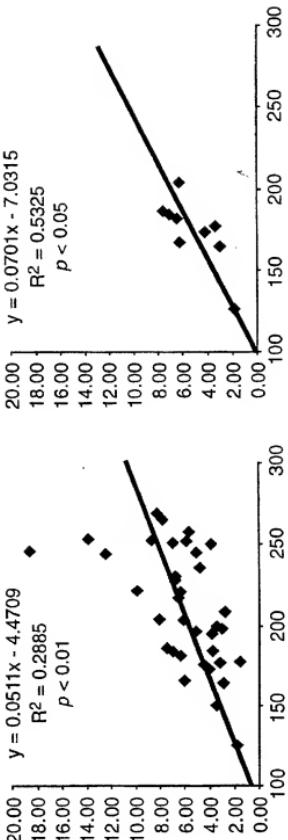
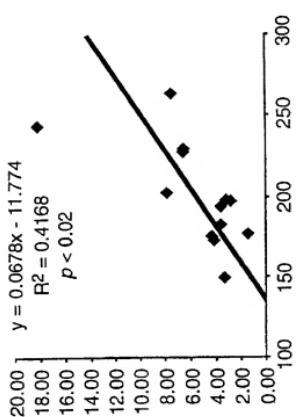


Figure 3(j)

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Band 60 v. Body Weight - B animals



Band 60 v. Body Weight - C animals

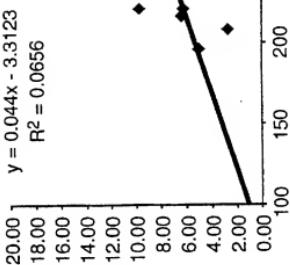


Figure 3(ii)

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**Band 60 & Body Weight
Fasted Animals**

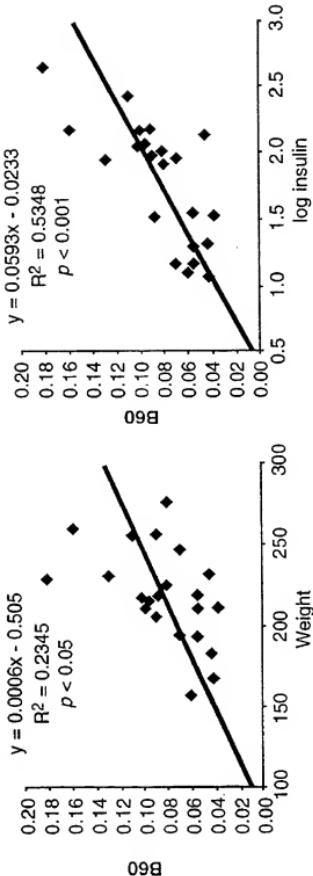


Figure 3(iii)

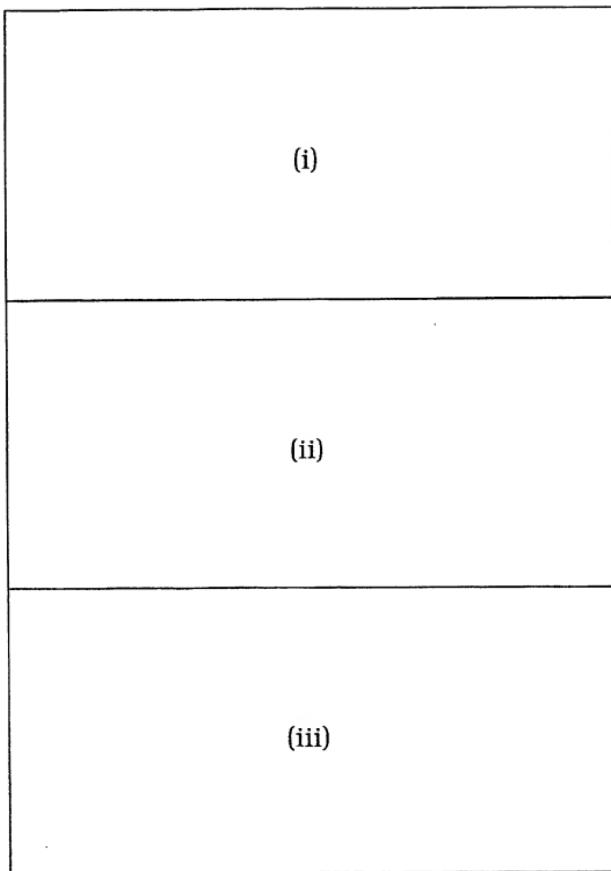
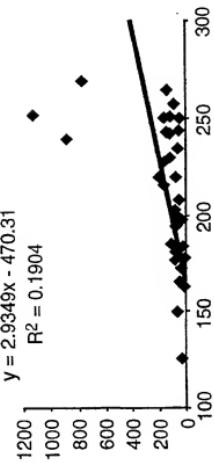


Figure 4

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10/20

LIVER**Band 38 v. Body weight - All animals****Band 38 v. Body weight - A animals**

$$y = 0.8725x - 91.784$$
$$R^2 = 0.4132$$

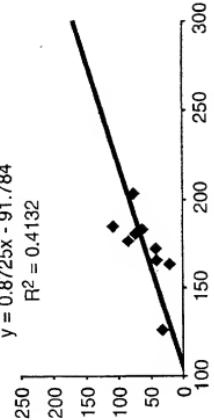


Figure 4(i)

11/20

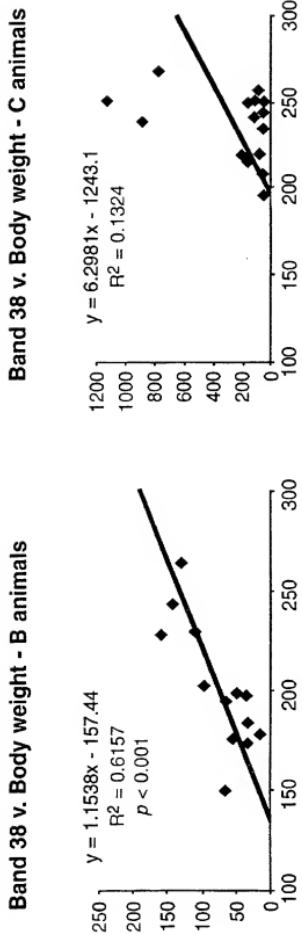


Figure 4(ii)

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Liver - Band 38 v. Triglycerides

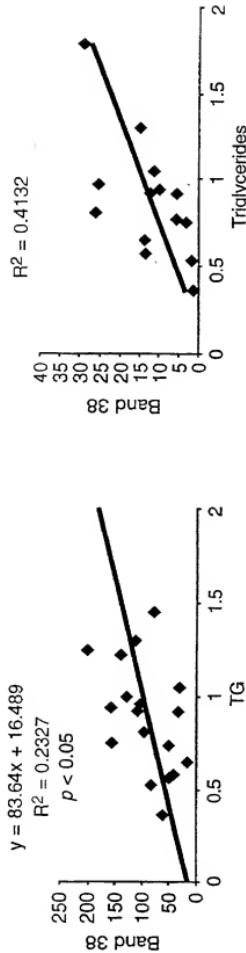


Figure 4(iii)

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Genomic structure of the human band 55 gene

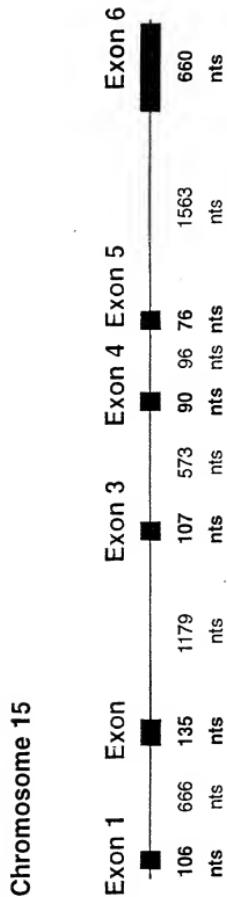


Figure 5

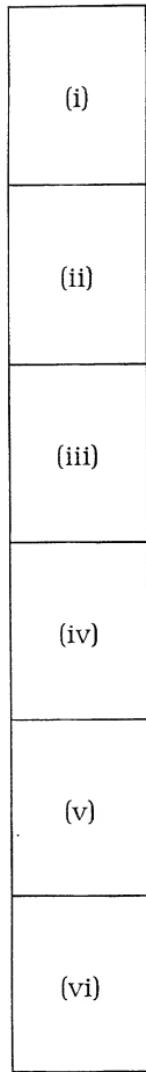


Figure 6

15/20

1 CAGGGCTGGG CGGC GGCG CGGC GGCGCGGTC ATGGAACGCC AAGAGGGAGTC
 ↑ ↑
 Transcription initiation site translation start codon
 start exon 1

51 TCTGTCCGCG CGGCCGGCCC TGGAGACCGA GGGGCTGCGC TTCCCTGCACA

101 CCACCGGGTGA GTCGTTGCGG GGCA GCGCCGGG EGCGCGCCGC CACTTTGCG
 ↑
 end exon 1

151 ACGCGCAGCC ATGATGGGTG GGTCGTCCGC CGCTGCACCG GGCGCCGGAG

201 CCTGGGAGGC CTGGGAACGG TCAGGGCGTTG GCGCTTACGC GGACCTTGGG

251 CAGCAGGCC CGACCTTGCG CGGAGGCTTC CGGGAGCCG CACTTCCCTG

301 GCGGGCTCGG CTGTCCCTTG TTTGCGCAAG TCTTTTTGCAACACAGGCC

351 CTTCTGTGG TAGTTACTGG GGTCACTCGG CGTTGGCGT TTGCGCTGTGG

401 GACCCGTCCC ACACAGCCCC ATACACACTC CTGACTCCCC GCGCTGTAC

451 CCCCTTCTAT GTGGCTCTGA AAGGCCTTG CCTTCCTGAT TCAGATTAGT

501 TGCTCTTCAT TCTTCAAAAC CCAGTTGCTG TGCCCTCCAC ACTCTAACTG

551 CCCCGACTC CCCAGATGGT TGGGAAGTCT CACTTCTCAG TGATCCCTGA

601 ATTGTGCGCAC TTCTTGAGTT CGTGTAAAGTAA CGATCTACTT AGGAGGCTTT

651 TTCCTCAGCC TAGACCAGTA AGGCTTGAG GGCAGGAGTT ACACTTGTG

701 TTTGTTGAGT CTTATGGAAA GGTCAACTAG TAGTGTCAATT TTTAGTTTT

751 TGAAAAACTGT TTTCTTTTC AGTGGGCTCC CTGCTGGCCA CCTATGGCTG
 ↑
 start exon 2

801 GTACATCGTC TTCAGCTGCA TCCTTCTCA CGTGGCTTT CAGAACGCTTT

851 CCGCCCGGCT AAGAGCCTTG AGGCAGAGGC AGCTGGACCG AGCTGCGGCT

901 GCTGTGGGTT AGTGCCTGAT AACCGAAATG AAAGCGGTGG TTTGCACCT
 ↑
 end exon 2

Figure 6(i)

16/20

951 CCTTTATATT AAGAGTTAGT CTCTTAGTAA AAGTAAGAGG GGCCACACAG
1001 GAAGACCTG TCTCTATTAA AAAAAAAA AAATAGCCGG GAGTGGCGGC
1051 ACGCACCTGT AGTCCCAGCT GCTCAGGAGG CTGAGGCGGG ATAATCACTT
1101 GACTCCAGGG ACTCAAAGCT GCAGTGGCT ATGCTCGGGC CACACTACAC
1151 TCCAGCCTGG GCAATTGATT GAGACCTTGT CTTAAAAAAA AAAAAAAA
1201 AAAAAAGTAGG AAGTATATGG TTCTCGGTGG GGCGCGGTGG CTCACACCTG
1251 TAATCCCAGC ACTTTGGGAA GCCGAGGCAG GAGGATGACT TGAGGTCAGG
1301 GGTCGAGAA CAGCCTGGCC AACATGGTGA AACCTGTCT CTACTAAAAA
1351 TACAAATATT AGTGGGGCGT GGTGACGGGC ACCTGTAATC CCAGCTATTAA
1401 GGGTGGCTGA GGCAGGAGAA ATCGCTGAA CCTGGGAGCT GGAGATTGCA
1451 GTGAGCTGAG ATTGTGCCAC TGCACCTCCAG CCTGGGCAAC AGAGTGAGAC
1501 TGTCTTTCT TTCTTTTTT TTTTTTTTC TATGAGATGG AGTCTAGCCT
1551 TGTTGCAAAG AGCGAGACTC TATGAGTACA CGTTATGAAT AGAAATGAGT
1601 TCATTTCTAT TCATAATGCT ATTTGGAAGG ATTTTCTTT TCTGTAGAAA
1651 CAAATACTTA AGAACCTTCT GCGCTAATTA AGGGATGGAT AATGATTAG
1701 AAAACTTTAT ATTCCTTGG TAGTCTTCCA GGATTCTAGT CAGCCTAGAG
1751 ACTGTGGGTG TCACTGAGGT ATCCAAGATG TGCTCTGTGT GGCCACTATC
1801 CCAGGCTTTA TGAATCGGAA TTGCTCAGGG GAACTCAGAA ATTGGCATTT
1851 CTAACAGATT TCTGGTGTAG TAGATATTTG GGGCTAAAAT CGGTGGCTCA
1901 GCAACAGACC CCTGCCCCCT GAAGCAGTAA AATGTATGCA GAGGGGTTAG
1951 GAGTACTTAT GTAAAAATAT GTTGTTCAT TGTCTGATAT CCATACCTCT
2001 TTATACTTTT AATAATATGG AACTCAAAA GTTCTATTT TATATTGTAC

Figure 6(ii)

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17/20

2051 ACAGTGCTT ATCTCCATT TTTCTGACA TTTAGAAC TGATGTTGTT
 ↑
 start exon 3

2101 GTTAAACGAC AAGAAGCTT AGCAGCTGCT CGACTGAAAA TCCAAGAAGA

2151 ACTAAATGCG CAAGTTGAAA AGCATAAGGA AAAACTGAAA CAAGTATGAA
 ↑
 end exon 3

2201 CTGGTTTCAG TTTGAATGTG TGCATAGAAA TTGTCAGGAG TTAGTGGCT

2251 AACGATGCCT GTGTCTGTGT TGTCTATAAG CTTCTAGGAC CAGGTCCTAT

2301 CCCATTAGAT TCAATAAGCA TTTCAGTTCC TACCATGTAA GTATTGGTGA

2351 TATCAAGAAG AATACACGAT TGTTAGGGAA CACTAGATGT GTGAATATAT

2401 TACCATGAAA GGTCCAGAGC ACAAAAGGAG GGACAGGCTG GAGCAGGGAG

2451 CATGTGAGTG TGTGTGTGCA TGTGCCTGTG TCTTCCCCAT TACCAAAAAT

2501 GTCCTGACAG GAGTGAGTT CAGAAGAATG GAGTCAGTAA TCTTTTCAT

2551 GAAACATTTT GCTTCTTTA ATAGTGTACA AAAACCAAAG CTGCTCTATG

2601 TGAGTTAAC TCACACTACC AGATCACAAAC AGTTTTATTA ACTAAAGAAA

2651 ACGAGGGTGA AGTTTGTCT GAAAGACATT TAAATTAAGA ATTATCAGAG

2701 TTAGCTTGT CTTTGAGAGA AATGGCAGCT TCTGAATTCT TTCTGTAAAA

2751 TGTGATTGTT TCTCAGCTTG AAGAAGAAAA AAGGAGACAG AAGATTGAAA
 ↑
 start exon 4

2801 TGTGGGACAG CATGCAAGAA GGAAAAAGTT ACAAAAGGAAA TGCAAAGAAG

2851 CCCCAGGTGA CTGGAGACCT CGGCCGGCTG GCATGCGGTA GATGAAGATT
 ↑
 end exon 4

2901 GCCAAGTAGA ATGTTTTAAT TGCTTCTTAC ACTACTGTGT GTGTTCAAAC

Figure 6(iii)

18/20

2951 AGGAGGAAGA CAGTCCTGGG CCTTCCACTT CATCTGTCTT GAAACGGAAA
 ↑
 start exon 5

3001 TCGGACAGAA AGCCTTGCG GGGAGGAGGT AAGCACCCT GATGTCAAAT
 ↑
 end exon 5

3051 GTTAACAGAT TTTCAACACT TACAGGATAT AGTTACCTTT TAAGAACAAAG

3101 ATTGTTGTT TCTTTGTCCA TAAATTAAAGA CTAATTCTT AGGATTGTGA

3151 AGATTCAATA AAGGAAACAG ATGCAAATCA CCTCCTAGGT CCTCACTAAG

3201 TACTTAGAAG GATTGTACTT ATAGTATTCT AACTTGATCC TTCTGCAGCC

3251 CCGTAGAGGG AGAGCTAAGT AGGGTGAGGA ATTGTCTGCC AATCTTCAGA

3301 TGAGTGTCAA GGAGCTGGAA CACAGTGGTT TTGGTCTTTC TGGCTGGGAC

3351 CACCTTGTTT CTTGCAAATA ACAAGGAGTA GCAGACAGAT GCTCATCCAA

3401 AGCTGCTTCC TGTGTGCAGC ACTGCCCGG GGACTCTGGA TGATGCCACA

3451 GCAGTCTGTC TTCATCCCAT CCCTGAGAAAT TTCAAATCTG GGAAGATGGG

3501 ACTCACAAAC GAAAATAAGC AATCCTGGT GATTCTGGCT AAGAGTTGCA

3551 AGTTACTGCT GAGGAAGGAA AGAACAAACA CACTAGAACCA CTGTAGGAAC

3601 CAAGGCGGAA GATTTTGAT CCTCCATAGG AGGAGAGGGG CACCGCAGAG

3651 GCCCTGATGG TGTCTTGAG GACTGAGGAA AGACTGGGC ATGGGCTCCA

3701 AGGCAGCAGG GCCACAGACT TGGCTGACCT TAAACGCTGA GCTGTAATCC

3751 CCTTTGTGTC AGAAGACTAA ACCTGGCTT CTGTAGAGAA GGTGATGCAT

3801 CTGGAAAGAA AATGCTATT TTAAATGGTC CTGCCGGAAAG CTTATTTTA

3851 GACACATAGA GGTGATATT AGGAGAGGAA TGGAAATCGT AGAAGATGGA

3901 ATGCAGGGTG TGCTTGCCTG CACGGCCTCT TTCAGCATCC CCAGCATTTC

3951 TGAGCTGGGA CTTTGACTA GCCTGGCTT ACAAAATAAGG AACTGAGGC

Figure 6(iv)

19/20

4001 ACAGTGTTA ATTGCCAAA GATTCCACTA TAAGTAAGGA GTAAAAGTAA
 4051 CATTAAAGTT CTGGGTGGCC CTAGAACCTT AGCACTCAAC CAGGTTACCA
 4101 GTTGTGCACT GACTTTGGGA AGCTCATGAG GGAGTGGGGT GGTTGGGGGT
 4151 AGGGAAGGAT ACAGAAAGACC CGCTTCTGAC TGGTAGAAGT GACAAGTTG
 4201 ACTCTTGATT TTTTTAATC TGTTTCTGT AGCGTGAACA GCCCTTATT
 4251 GAATGTATGA GTTTTAGTAA GCACTGTGAT AGGAGGATTC ATATACTTAA
 4301 ATCAGGCCCT CTTGAGAGAG TTTTTGGTG ACCCTTTGC ATGTGTTCG
 4351 GAGGTTGGGA CAAAGAACGCT GAATGACTTT TTTCCCCACC AGACAATCAG
 4401 TTCAAATGGC AATCACAATA TAAAGGTTTT TTTTTTTTC ACATAGCTAA
 4451 AAGGTTTTTT TAAATGTCCC TTAGGATCTG TATCTTGCA GTGCTTGCG
 4501 TGTCACTCTC ATAATTTAT TGTGGATATA CAATGTTCCC AGATTTCAAG
 4551 ATTTTATCA ATACTGTTGT GCTGCTTTC TGTCCCTCCA GTTTATAACC
↑
start exon 6
 4601 CGTTGTCTGG TGAAGGAGGC GGAGCTTGCT CCTGGAGACC TGACGCAGA
 4651 GGCCCGTCAT CTGGCGGATG AGGCTAAGAA TCTTGTAGT GTCACTTTG
↑
translation stop codon
 4701 ACATTAGCAA GATGAACCTT TAACCCTCGA TTCAATTGCC TTACGCACGC
 4751 TTTTCACAGT GACTAGCCAA GGGGAGGTGG GGTTGATTT TCATGCTAAC
 4801 TACACCTGCA TATGTCAGGG CTCCAGTCAG CAAAAGGTAT AGATGTTGCC
 4851 TCTAGGCATG AGGTCATTGG TCACATTCTA CTTGGAGACA GTGATTGCAT
 4901 TCATTGATTT CATGGTTAAT TGCTAGTTGG TAGGTAAGG CCTCTAGATG
 4951 ATTAGCAATC TTGATAAAAG AGGCCTAGTA ATGTTCTTT GAGGTTAGAA
 5001 ATCCTTGCTG CTAGGACAGT CTCTGTGACA GGTTGCGTTG AATGATGTCT

Figure 6(v)

SUBSTITUTE SHEET (RULE 26)RO/AU

20/20

5051 TCCTTATCAA TGGTGAGGCC ACCAGTGAGG ATTACTGATG TGGACAGTTG
5101 ATGGGGTTTG TTTCTGTATA TTTATTTTA TGTACAGAAC TTTGTAAAAA
5151 CGAAACTATT TAAAAAAACAA GAATAACATT TTTAGCATCT TTATTCAAGG
5201 AGATTTATGG ACTTCAATT GTCTATCAAA CATTAAATAG CTTTTTATTA
5251 C
↑
transcription termination site
end exon 6

Figure 6(vi)